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| 10/747,673 | 12/30/2003 | Hiroyuki Egami | 122.1575 | 2908 |
| 21171 7590 04/03/2009 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | | |
| EXAMINER | | | | |
| WALSH, DANIEL I | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/747,673

Applicant(s)

EGAMI ET AL.

Examiner

DANIEL WALSH

Art Unit

2887

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Receipt is acknowledged of the amendment received on 6-16-08.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 3-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda et al. (US 6,731,778) in view of Fujioka (US 7,014,105).

Re claim 3, Oda et al. teaches an ATM with a bill receptacle and a security camera that captures an image when one accesses the receptacle (FIG. 2). As the hand sensor is inside the receptacle, and trips the camera to capture the image, it is understood that the image would

therefore include inside the receptacle, namely the hand location, which is inside the receptacle. The ATM as known in the art can be used for depositing and withdrawals.

Oda et al. teaches a bill receptacle 20, but is silent to it having a shutter. However, the Examiner notes that shutters for such bill receptacles are known in the art for additional security/protection, and therefore is an obvious expedient for such predictable results. As currency is at least deposited from rollers into the bill receptacle, as the bills come from below (as taught by Oda et al.), as per the rollers, it would have been obvious to one of ordinary skill in the art to have a bill holder inside (below) the shutter to securely store bills.

Oda et al. teaches a security camera 17 that captures an interior of the bill receptacle when the hand is detected (shutter would therefore be open). Oda et al. is silent to the camera being positioned in the shutter. However, Oda et al. teaches that the placement of the camera 17 is so that one camera with one frame can capture an image of both the face and hands of the users to reduce complexity/cost, while also reducing image data (col 7, lines 1+ and FIG. 34-35), as opposed to having a separate camera at each body part location that is desired to be captured, as previously done. Therefore, the Examiner notes that it would have been obvious to one of ordinary skill in the art, in light of the teachings of Oda et al. to have a separate camera in the bill receptacle to capture a picture of the hand of a user, as Oda et al. teaches that was previously done, to provide a known solution to a known problem with expected results. Therefore, both separate and single cameras have been documented as known solutions to the problem. The selection of separate cameras provides expected results of enhanced image quality/detail/field of view, more security as it is harder to block separate cameras, etc. Though silent to the camera being in the bill receptacle, the Examiner notes that it would have been obvious to one of

ordinary skill in the art, to have a camera in the bill receptacle if one desires a separate image of the hand of the user, in order to capture a detected hand by having it close to the subjects hand and the currency/money. Separate cameras also provides the benefit of protection of 1 camera going offline, other images can still be captured from the other devices. The mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Therefore, merely replacing one camera to capture two body locations, with two, as previously performed, is well within the skill in the art. Placement within the receptacle is an obvious expedient to have the expected results of being closer to the subject of image capture, having a wider angle range to capture because only 1 subject is to be captured, while also being harder to block and possibly more discrete an installation.

Oda et al. teaches a single sensor 46 for detecting insertion of a hand into the receptacle behind the shutter, analogous to bill removal (as it is in the receptacle). However, the Examiner notes that the mere duplication of the essential working parts of a device involves only routine skill in the art. (*St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8). Plural sensors might provide more accurate coverage, and provide reliability in that operation may still continue if one sensor is damaged, for example. Therefore the duplicating one sensor to include more than one, is an obvious expedient for more precise detection coverage, redundancy, etc.

Oda et al. teaches the security camera captures a second image of the interior when the hand insertion is detected (via sensor 46). This for example, could be for after the fifth step as described by Oda et al. (withdrawal of cash in a withdrawal transaction). Therefore, the Examiner has interpreted that Oda et al. teaches image capturing when the hand is inserted (which is also interpreted as when currency/bills are withdrawn). The Examiner notes that a first

activation for image capture of the fifth step can be interpreted as the first image operation, as claimed (detection of the hand of the customer inserted into the bill receptacle).

A subsequent image capture by the fifth step can be interpreted as the second image operation as claimed (detecting bills being taken out). The Examiner notes that Oda et al. teaches that the sensor detects hand insertion/bill removal via the sensor(s).

The claims do not recite that the first and second images are of the same customer, or during the same transaction of the same customer. Accordingly, subsequent images taken by the image capture of Oda et al. such as a first image being captured when the system senses a hand in the receptacle and that a second image can be captured in the same way, upon a subsequent transaction by the same or even a different user, As Oda et al. teaches that detection of the hand is interpreted as detection of bills taken out (when during a withdrawal transaction). As discussed above, a plurality of sensors is an obvious expedient to detect hand/bill withdrawal, where it would have been obvious for the sensors to trip when hands are inserted/bills withdrawn.

Oda et al. teaches means for determining if currency bills remain and means for performing corrective action (col 28, lines 40+).

Nonetheless, Fujioka teaches a shutter 6.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Oda et al. with those of Fujioka for security/protection/safety.

Re claim 4 and 9, the Examiner notes that Oda et al. teaches that the CPU starts monitoring a time when the operation is completed (such as when the

card/coin/banknote/currency/etc. is no longer detected by a sensor, takes images, and if the images show that the user is not present, the transaction is cancelled and takes in the card, currency, bankbook, etc. (col 30, lines 28+). This is done for security purposes, for if someone forgets to remove currency/their card, etc., the machine takes pictures and cancels the transaction and takes back into it, the card/cash/money, etc. Though silent to doing this when the shutter is opened and the money is not taken out, the Examiner notes that a shutter has been discussed as an obvious expedient to provide security/protection. Therefore, the Examiner believes, that in light of the teachings above where the card, bankbook, bank note, coins, etc. are taken back into the machine when a user is not detected after a predetermined time, it would have been obvious to do so when the shutter is opened and the money is not taken out, in order to provide security in instances when a user forgets to remove the currency. As this capturing occurs to protect the user when the money is not taken for example, it would have been obvious that such instances include when the sensors have not been triggered, as such is indicative of the money not being taken.

Re claims 5-8 and 10-15, Oda et al. teaches separate security cameras 217 and 218, and as discussed above, a separate camera in the receptacle as well. The Examiner notes that the cameras 217 and 218 capture non-overlapping ranges/independent images, as one captures facial images, the other captures hand images. Further, as discussed above, insertion of a camera into the receptacle to capture hand entry in there would also be interpreted as an independent image/non-overlapping.

Re claim 16, the limitation have been discussed above.

Re claim 17, Oda et al. teaches that if a threshold of time is exceeded, that the bills are taken back into the machine and images are captured. Oda et al. only teaches one threshold for activation of both steps of taking back bills and image capture. However, as Oda et al. teaches that if the users have forgotten to take out the banknotes, an alarm sounds three times, then the machine takes back the card/money, cancelling the transaction, and then captures image data (FIG. 33), Oda et al. teaches the same order/sequence of steps as claimed. The Examiner notes that adding an additional time threshold is mere duplication of a working element, known in the art, such duplication being recognized as within the ordinary skill in the art. Adding an additional threshold is merely applying a known technique to a known device/system/method to yield predictable results, not unexpected results. As such, it is not seen as a product of innovation, but merely a product of ordinary skill in the art. Supplying an additional time threshold to accomplish that which has been previously accomplished with a single disclosed time threshold is therefore seen as an obvious expedient/matter of design choice.

Response to Arguments

1. Applicant's arguments filed have been fully considered but they are not persuasive. The Examiner notes that the claim limitations (re claim 3) do not require that the first image and the second image are during the same transaction or are taken of the same customer. Therefore, the Examiner notes that separate images of separate users (or the same user performing separate ATM transactions/separate usages) appears to meet the claimed limitations. As discussed above, the mere duplication of sensors is an obvious expedient for improved hand sensing. Therefore, as it would have been obvious to have two sensors to collectively sense the hand/withdrawal, the

Examiner notes that tripping of the sensors would cause first and second images to be captured, when they are tripped in separate instances, for example (a first and second customer, or a single customer performing multiple transactions). Further, the teachings of Oda et al. with regard to withdrawal of money, support that tripping of the sensors detects hand insertion/bill withdrawal, as claimed.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (See PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Paik can be reached on (571) 272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel I Walsh/
Examiner
Art Unit 2887